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**Aim:** To investigate the efficacy of 640-slice multidetector computed tomography (MDCT) for detection of osteo-odonto laminar resorption in the osteo-odonto-keratoprosthesis (OOKP) compared with the current standard, 32-slice MDCT.

**Methods:** Explanted OOKP laminae and bone-dentine fragments were scanned with 640-slice MDCT and 32-slice MDCT. Pertinent comparisons including image quality, radiation dose and scanning parameters were made.

**Results:** Benefits of 640-slice MDCT over 32-slice MDCT were shown. Key comparisons of 640-slice MDCT versus 32-slice MDCT included: percentage difference and correlation coefficient between radiological and anatomical measurements 1.35% versus 3.67% and 0.9961 versus 0.9882, respectively; dose-length product 63.50 versus 70.26; rotation time 0.175s versus 1.000s; and detector coverage width 16 cm versus 2 cm.

**Conclusion:** Resorption of the osteo-odonto lamina after OOKP surgery can result into potentially sight-threatening complications, hence it warrants regular monitoring and timely intervention. MDCT remains the gold standard for radiological assessment of laminar resorption, which facilitates detection of subtle laminar changes earlier than the onset of clinical signs, thus indicating when pre-emptive measures can be taken. 640-slice MDCT exhibits several advantages over traditional 32-slice MDCT. However, such benefits may not offset cost implications, except in rare cases, such as in young patients that might undergo years of radiation exposure.

#### 0593: TEMPORAL ARTERY BIOPSY FOR GIANT CELL ARTERITIS: AN AUDIT OF 471 CONSECUTIVE CASES – WHAT HAVE WE LEARNT?

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**Aim:** Giant Cell Arteritis is a chronic granulomatous vasculitis of large and medium vessels. It is predominately a disease of the elderly and untreated can lead to permanent visual impairment. Whilst early steroid treatment is key, obtaining a histological diagnosis is valuable, particularly with regard to ongoing management. The aim of our audit was to assess the quality of Temporal Artery Biopsy (TAB) against national guidelines and also assess the role of ESR and CRP as predictors of positivity.

**Methods:** 471 consecutive patients who underwent TAB at Western Sussex Healthcare Trust between 2002–2013 were identified via the pathology database and retrospective data on patient demographics, length of arterial specimen, histology outcome and ESR/CRP levels were recorded.

**Results:** 70% of cases were female with a mean age of 72 yrs. The overall positive biopsy rate was 25.6%. Average biopsy length was 15.6mm (range 2–50mm). 82% of biopsies met the British Society of Rheumatology (BSR) recommendation of 10mm length.

**Conclusion:** Increasing biopsy length, ESR and CRP were all associated with increased biopsy positivity rate. A new referral proforma for TAB has been developed which will be presented along with further analysis of the results.

#### 0661: A NOVEL APPROACH TO THE MANAGEMENT OF TRAUMATIC MACROGLOSSIA IN PATIENTS WITH A DEPRESSED CONSCIOUS LEVEL – CUSTOM MADE SILICONE MOUTH PROP AND HUMIDIFIED OXYGEN

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**Introduction:** In tracheostomy patients with a depressed conscious level, traumatic macroglossia can occur resulting in protrusion of the resting tongue beyond the alveolar ridge. This exposes the patient to the risk of mucosal ulceration, difficulty swallowing, oropharyngeal obstruction and oral infection. Furthermore, there is limited access to the oropharynx for suctioning of secretions and basic oral care is compromised. The pathophysiology is poorly understood but thought to be due to a neuropathological mastication reflex that results in grinding, clenching, mastication and gnawing, causing traumatic injury to the tongue leading to a grossly enlarged and protruded tongue.

**Case Study:** In a recent case, a 42-year-old Nigerian woman with Posterior Reversible Encephalopathy Syndrome with a tracheostomy and a

depressed conscious level developed severe traumatic macroglossia with a tongue too large to reduce beyond the occlusal table.

We devised a custom-made silicone mouth prop at her bedside that maintained mouth opening and ensured repetitive injury to the tongue and oral mucosa was avoided. A mask with humidified oxygen to moisten the tongue was also applied.

**Conclusion:** Within 24 hours of application, mucosal ulceration improved and within 10 days, the tongue decreased dramatically in size.

#### 0766: A RETROSPECTIVE STUDY OF HEAD AND NECK CANCER REFERRALS IN NHS LANARKSHIRE

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**Aim:** Head and Neck Cancer is the fifth most common cancer in Scotland, accounting for 6–10% of new cancer diagnoses<sup>1</sup>. Patients may present to their GP or GDP with oral lesions and early cancer detection is crucial when planning and providing optimal treatment. Is the urgent suspicion of cancer pathway is correctly utilized, meeting the current waiting time guidelines? Our aim was to examine the number of patients referred to the department as routine but diagnosed with malignancy.

**Methods:** Retrospective audit to identify all patients referred to NHS Lanarkshire via the Urgent Suspicion of Cancer pathway in 2013 as well as those referred as routine but were diagnosed as malignant

**Results:** Less than 10% of patients referred on the urgent suspicion of cancer pathway, had a malignancy. The remainder of the patients had benign lesions including traumatic ulcers and polyps. A small cohort of patients were referred as routine but were malignant

**Conclusion:** The urgent referral pathway displays over utilization, often with benign referrals. Further education regarding oral pathology may be beneficial with suspicion of cancer referrals. However, it is reassuring that a small cohort of patients have been diagnosed with a malignancy.

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#### 0770: TWO AUDITS ON THE TWO-WEEK WAIT HEAD AND NECK SUSPECTED CANCER REFERRALS: IS THE REFERRAL FORM BEING FILLED IN CORRECTLY AND IS THIS CONTRIBUTING TO INAPPROPRIATE REFERRALS?

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**Aim:** The aim of the two audits was to assess and compare the accuracy and efficiency of 2WW referrals made to the oral and maxillofacial department (OMFS) at Worcestershire Royal Hospital (WRH) and New Cross Hospital (NXH).

**Methods:** 100 consecutive patient records were retrospectively assessed at each of the OMFS departments at WRH and NXH. At WRH the time frame extended from November 2013 – February 2014. At NXH the time frame extended from September 2013–April 2014. Paper records and scanned notes were utilised for data collecting.

**Results:** At WRH 8.5 % of forms were correctly completed compared to 14.6% at NXH. 94% were appropriate triaged at WRH compared to 96% at NXH. 79% of referrals were seen within 2 weeks at WRH, compared to 98% at NXH. 45% of appropriate referrals were in line with NICE CG27 guidelines at WRH compared to 42% at NXH

**Conclusion:** The referral forms are being filled in incorrectly at both units, highlighting a significant contributing factor for inappropriate referrals. Its accessibility needs to be addressed by ensuring an up-to-date form is available on each trusts website with completion guidelines. Primary practitioners need to be educated on NICE guidelines for urgent oral cancer referrals.

#### 0809: OSTEOMYELITIS OF THE HEAD AND NECK

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**Aim:** Today, osteomyelitis of the head and neck is an uncommon condition due to the ready availability of antibiotics. However when present it can have devastating consequences, impacting on both function and

aesthetics. Management of such cases can be complex and individual clinicians are unlikely to gain significant experience of these cases during their practice due to their rarity.

**Methods:** Our case series reviews patients diagnosed with head and neck osteomyelitis at KCH and treated between January 2003 and December 2012.

**Results:** The data collected was analysed and used to identify risk factors, treatment outcomes and make suggestions for management. Deciding the optimal duration and type of antimicrobial therapy for these patients is the challenge, alongside the need to consider whether surgical intervention is appropriate.

**Conclusion:** This case series provides a structure upon which individual cases can be managed as our review suggests acute cases can be treated with antibiotics alone. Chronic cases should be managed with consideration for early surgical debridement in addition to antimicrobial therapy. However, antimicrobial treatment should be instigated prior to the definitive establishment of a diagnosis in order to yield the best clinical outcome.

#### 0915: AUDIT OF THE DIAGNOSTIC QUALITY OF LABIAL GLAND BIOPSIES IN THE DIAGNOSIS OF SJÖGREN'S SYNDROME IN EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST BETWEEN NOVEMBER 2011–NOVEMBER 2014

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**Aim:** To determine the quality of labial gland biopsies in the diagnosis of Sjögren's syndrome. Histological features of Sjögren's syndrome from labial gland biopsies are seen as a key component in determining a definitive diagnosis. Literature reviews reveal no 'gold standard' stating the diagnostic criteria of labial gland biopsies.

**Methods:** Histopathology data bases were searched to find all labial gland biopsies taken in relation to Sjögren's syndrome within EKHUFT between November 2011–November 2014. After consultation with the EKHUFT head and neck histopathologist, the following standard was devised:

To be of diagnostic quality;

- $\geq 6$  minor salivary gland lobules.

To be diagnostic of Sjögren's syndrome;

- Focus score of  $\geq 1$  (1 focus score is  $1\text{mm}^2$  with  $>50$  lymphocytes).

**Results:** Within the time frame audited 34 biopsies met the selection criteria. 13 were reported to be of diagnostic quality (38%), 6 as non-diagnostic (18%) and it was unclear from the histopathology report as to the diagnostic quality of the remaining 15 samples (44%).

**Conclusion:** It is not possible to provide accurate data on the diagnostic quality of labial gland biopsies as 44% of the histopathology reports did not comment on the focus score or the number of lobules in the sample.

#### 0981: A REVIEW OF THE EPIDEMIOLOGY, PATHOLOGY AND OUTCOME MEASURES OF 300 NON MELANOMA SKIN CANCER PATIENTS, TREATED WITHIN OUR DEPARTMENT

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**Aim:** We provide a significant non melanoma skin cancer (NMSC) service within the South West of England. We review the epidemiology, pathology and outcomes of 300 consecutive cases treated within our department over a 2 year period.

**Methods:** We use electronic data collection for all NMSC patients. We adapted this system to allow data input to be carried out from smartphones, tablets or desktop computers from anywhere within the trust. Our internet based reporting page updates instantaneously and displays our outcome data as to our requirements. No patients were excluded during the period of our study.

**Results:** We present 300 cases of NMSC entered into our database. We display these cases as to demographics, diagnosis, treatment, and disease location. We explore post operatively as to resection margins and complication rates. Our results are demonstrated on our live reporting page.

**Conclusion:** The incidence of skin cancer in the United Kingdom is increasing and is associated with an ageing population and increasing lifetime exposure to sunlight. Collection of accurate data and analysis of resection margins and complication rates, as well as basic demographics and treatment numbers, is a vital aspect of providing an ongoing quality assured service within the National Health Service.

#### 0991: AN UNUSUAL CASE OF CHRONIC BILATERAL TMJ DISLOCATION

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**Aim:** We present an unusual case of a 42-year-old fit and well man who was referred by his GP with a two-month history of difficulty with eating and speaking. On examination he was unable to occlude his teeth and was not able to move his lower jaw. He could not recall how this happened but had been to A&E on several occasions and was told that his symptoms would settle on their own. He finally went to his GP who referred to King's Oral and Maxillofacial Unit's outpatient for review of his TMJ dysfunction.

**Methods:** On review in clinic he was immediately sent for imaging which confirmed longstanding bilateral TMJ dislocations.

**Results:** He was admitted urgently for manipulation of his jaw under general anesthetic. Despite his chronic dislocation his condyles were relocated and he was placed in strong inter-maxillary fixation.

**Conclusion:** We have carried out a literature review on the presentation and management of this rare event of chronic dislocation of TMJs which usually requires open reduction and present this successful case with clinical photographs and radiological imaging.

### Posters: Military Surgery

#### 0136: THE UTILITY OF SURGICAL KEY PERFORMANCE INDICATORS IN BRITISH MILITARY TRAUMA

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**Aim:** Performance Indicators are used in healthcare to compare actual against ideal care. We aimed to review the overall performance of surgical trauma care in casualties treated at Camp Bastion, Afghanistan. Our secondary aims were to assess the utility (clarity and relevance) of the 2008 British Military's surgical 'Key Performance Indicators' (KPI), and make recommendations for future surgical trauma care review.

**Methods:** The original set of KPIs was refined based on deployed clinical experience to provide 22 parameters that analyse surgical care. Data was prospectively collected for 150 consecutive injured patients who had primary surgery at Camp Bastion between 1st May 2013 and 20th August 2013.

**Results:** Median data recording was 99% (IQR 98–100%). Median relevance was 54% (IQR 10–99%). 80% of KPIs achieved  $>60\%$  compliance, of which 50% scored  $>80\%$  compliance. 11 KPIs were retained, 9 KPIs were refined and 2 were removed. We propose a new set of surgical KPIs for use in future military trauma surgical care.

**Conclusion:** KPIs must constantly evolve in order to maintain relevance and to highlight areas for improvement of the care for war wounded trauma patients. Our study highlights areas for improvement in service delivery and the utility of KPIs themselves.

### Posters: Miscellaneous Surgery

#### 0025: SHOULD N-ACETYL CYSTEINE BE GIVEN TO HIGH RISK RENAL PATIENTS PRIOR TO CONTRAST CT IN THE ACUTE SETTING?

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